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The Sign Language Situation in Mali

Abstract

This article gives a first overview of the sign language situation in Mali and its capital, Bamako, located in the West African Sahel. Mali is a highly multilingual country with a significant incidence of deafness, for which meningitis appears to be the main cause, coupled with limited access to adequate health care. In comparison to neighboring countries, the first school for deaf children was established relatively late—in 1995. Various sign languages have been used in Malian deaf education, but, following the regional trend, the schools for deaf children eventually settled for a variety of ASL adapted to French. The vast majority of Malian signers have not received formal education, however, and have no or only limited command of ASL. They use various forms of the local sign language, Malian Sign Language (Langue des Signes Malienne, LSM). The best-documented variety of LSM is the one used in Bamako, for which a dictionary and an annotated corpus exist. Another annotated corpus has been compiled for several varieties found in the Dogon area. Ambivalent attitudes are found in the deaf community with regard to the value and linguistic status of LSM and ASL, which pose a threat to the continued use of LSM, and deaf Malians are found to switch to ASL in areas in contact with deaf education or with formally educated signers.

The aim of this article is to inventory information about deafness and sign language use in Mali and its capital, Bamako, in West Africa.[1] The information on Mali, its deaf population, and its sign language situation comes from published and unpublished documents, my own observations, and personal communication with deaf and hearing members of the Malian deaf community. In 1999, when

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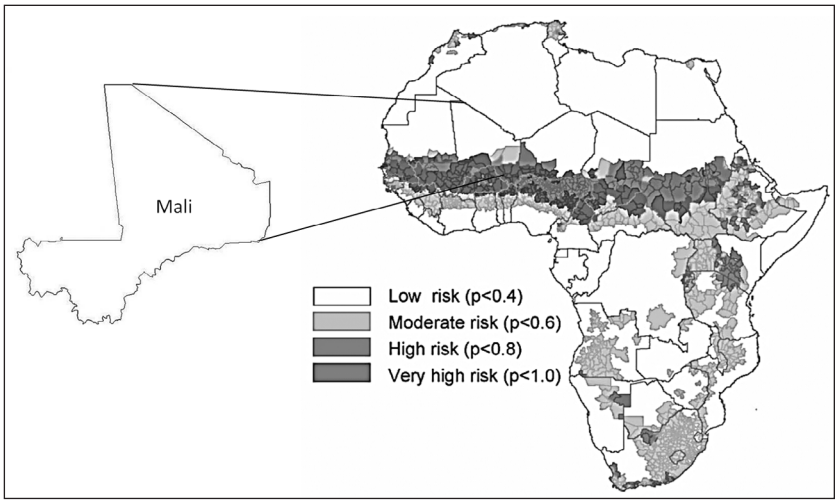

FIGURE 1. The country of Mali (left) and its position in the African Meningitis Belt. (The right-hand image is reprinted with permission from Molesworth et al. 2002).

I visited Mali for the first time to carry out a study on name signs, I met numerous deaf people. Between 2007 and 2012 I led two large documentation projects on varieties of Langue des Signes Malienne (LSM). Information on these research projects and their findings is presented later. The analysis of minimal pairs and the number system of LSM is based mainly on data presented in Pinsonneault's (1999) LSM dictionary.

Mali

Mali is a landlocked country in the West African Sahel (see figure 1). It is one of the most economically disadvantaged countries in the world. A large part of its population engages in subsistence-based agriculture. During the annual dry season, Mali faces regular outbreaks of meningitis and other infectious diseases (e.g., malaria) that may lead to deafness. As such, Mali is part of the African Meningitis Belt, which encompasses twenty-one African countries running from Senegal to Somalia (Molesworth et al., 2002), as indicated on the map in figure 1. Access to adequate health care is limited, as reflected in the fact that Mali has the second highest rate of infant mortality worldwide (CIA Factbook 2010).[2]

Of Malians who are older than fifteen years of age, about 30 percent are literate (CIA Factbook 2010). The predominant religion in Mali is Islam, and the country's official language is French. In addition, the Malian constitution recognizes thirteen spoken Malian languages as national languages, including Bamanankan (also known as Bambara), which functions as a lingua franca and is spoken to varying degrees by 80 percent of the Malian population.[3] For national languages, several facilities are provided, such as mother tongue education at the primary level, radio programs, weekly news bulletins on national TV, and newspapers.

Deafness in Mali

Hard figures on the number of deaf Malians are not available. According to the Association malienne pour les sourds (AMASOURD) in 2000 (cited in Dupont 2007), Mali is home to 200,000 deaf people. In a total population of thirteen million, this would mean a rough 1.5 percent incidence of deafness. However, AMASOURD is not explicit about the information on which it bases this estimate.

Looking at estimates and counts for (parts of) countries with similar situations, I suggest that the estimate of 200,000 deaf Malians and hence a 1.5 percent prevalence of deafness is relatively high. Consider, for instance, that UNICEF (1985) estimates a 0.5 percent prevalence of moderate to severe hearing loss in developing countries. Although different assessment methods and hearing loss criteria have been used, studies of smaller groups tend to confirm the UNICEF estimate for areas in West Africa (e.g., for Ghana see Biritwum et al. 2001; Brobby 1988). Several studies of deafness in West Africa conclude that the prevalence of severe/profound bilateral hearing loss in West Africa is three to four times that in industrialized nations, where its incidence is generally estimated at 0.1 percent (e.g., McPherson and Swart 1997). If profound deafness is between 0.3 percent and 0.5 percent in Mali as well, this would mean the number of deaf Malians is between 40,000 and 65,000. One medical study on deafness in a Malian population has found that 76 percent of forty-six deaf pupils of the École pour les déficients auditifs (EDA) have noncongenital deafness, for which meningitis was found to be the main cause (Mohamed et al. 1996).

As there is no one-to-one relation between the incidence of deafness in a country and the number of sign language users (cf. Mitchell et al. 2006), a separate study is needed to determine the number of sign language users in Mali. The number of signers with less than severe hearing impairment may be relatively high, as the availability of hearing aids and speech therapy is very limited.

Deaf Education in Mali

Mali has provided special education for deaf children since 1993, when the EDA was established in Bamako by Bala Keita, who retired as the director of the school in 2013. A second school for deaf children, Jigiya Kalanso (literally, "school of hope"), was established in 1994 by Dominique Pinsonneault, a linguist working for the Centre canadien d'étude et de coopération internationale (CECI), a Canadian NGO. In 2002 a previously established literacy center for deaf adolescents in the town of Kita was turned into a school for deaf children (Dupont 2007). The founder and director of the school, Dramane Diabaté, is deaf. His autobiography is forthcoming (pers. comm.). Around the same time, a school for deaf children opened in Goundam, near Timbuktu, on the initiative of a group of parents of deaf children. Around 2008, additional deaf schools opened up in Sikasso, Koutiala, and Ségou. In 2012 a special unit was opened in a hearing school in Douentza to accommodate the relatively large number of deaf children in that town and the surrounding villages during a sign language survey (mentioned later). The EDA plays a central role in the Malian deaf community by providing not only a meeting place for students but also social and instructional events for deaf adults. In addition, AMASOURD holds its meetings here and occasionally provides sign language training for teachers in schools for deaf children in Mali and sometimes even in neighboring countries. (For an in-depth description of the EDA see Dupont 2007.)

Deaf education in Mali has always been accepting of sign language use, and oralism has not been an official method. Although LSM predominantly emerged outside a school environment and continues to be used there, the language was the initial medium of instruction at both schools for deaf children in Bamako. At the EDA, LSM was

replaced by Langue des signes française (LSF) following contacts with supporting organizations in France (Bala Keita, pers. comm.). Around 2001 these two schools jointly decided to use ASL for instruction. Around 2009 a volunteer from CECI was appointed for one year to teach Langue des signes québécoise to a group of deaf pupils.

Most schools have at least a number of deaf teachers with adequate signing skills, but their deaf pupils complain about the lack of adequate signing skills in the hearing teachers. In practice, as a combined result of the hearing teachers' insufficient sign language skills and very mixed classes in terms of hearing loss, classes are often taught in spoken French and supported by signs. The written and spoken language of instruction is French, the official language of Mali. It is important to note that most Malian families do not use French as their home language but instead speak one or more of the fifty-six local languages, such as Bambara, Fulfulde, or Soninké. Since its independence in 1960, Mali has expressed the desire and made efforts to support mother-tongue education. Bilingual education, in the official language and in the national languages, was given legal status in 1999 (Traoré 2001).

The schools for Malian deaf children have insufficient capacity to accommodate all of the deaf students in the cities where they are based, so the majority of these youngsters receive no formal education. Some deaf children are sent abroad (mostly to France but also to Russia in the past) for special education. It is unknown how many children this involves and how many of them return to Mali after schooling. In Mali an unsuccessful attempt was made to integrate deaf and hearing students (Bala Keita, director of the oldest school for deaf children, pers. comm.). In 2011 the first deaf Malian enrolled at Gallaudet University.

Deaf education started relatively late in Mali compared to other countries in West Africa, where the Reverend Andrew Foster and his organization, the Christian Mission of the Deaf (CMD), began opening schools for deaf children in 1959. They established thirty-one schools in eighteen countries, mainly in West and Central Africa (Carroll and Mather 1997). In the 1980s Foster attempted to found a school in Mali but did not succeed. Kalilou Diallo, a deaf man, reported having worked or spent time with Foster during his visits to Mali. In addition to setting up these schools, which used Total Communica-

tion (Foster 1975) as their language of instruction, the CMD invited deaf students, including three deaf Malians, from various countries to be trained at one of the CMD centers, such as the Ibadan Mission School for the Deaf. Two of these Malians later became active board members of AMASOURD.

Sign Languages in Mali

As a result of the language choices in deaf education, various sign languages are used in Mali. As mentioned earlier, three sign languages of foreign origin have been introduced in the context of deaf education: ASL, Langue des signes française, and Langue des signes québécoise. Although the latter two have not had a lasting impact on the Malian deaf community, Malian ASL has been used in deaf education for the past fifteen years and has become one of the country's two major sign languages.

Local sign language varieties have evolved outside the context of deaf education. In Bamako and other urban centers, many deaf people are in regular contact with other signers. Smaller towns may have many fewer deaf residents; thus they may have only limited or even no contact with other signers. No studies have been done to establish the level of contrast between these local varieties. Before discussing the use of Malian Sign Language and its linguistic features, I consider the use and form of ASL in Mali.

ASL in Mali and Langue des signes franco-africaine

In virtually all of the countries of West and Central Africa, ASL is used in deaf education, albeit often in conjunction with other sign languages (Nyst 2010). Not much is known about the linguistic features of African varieties of ASL. Only a very limited number of dictionaries of West African varieties of ASL has been published to date.[4] The ASL-based Ghanaian Sign Language dictionary (Ghana National Association of the Deaf n.d.) contains around nine hundred signs. Other dictionaries of ASL-based sign languages are Ajavon (2003) for Nigerian Sign Language, GADHOH (2002) for Gambian Sign Language, and Tamomo (1994) for Langue des signes franco-africaine (LSAF), as well as ASL in Francophone African countries, published in Benin. An LSAF DVD dictionary is also available (Kamei 2008).

Kamei (2006) presents an analysis of an ASL variety used in French-speaking countries. Without giving examples, he mentions various characteristics of these varieties. Thus, he notes that "indigenous signs" are part of the lexicons of LSFA. Indeed, Malian ASL appears to use local signs (sometimes referred to as "natural" signs) for culture-specific notions, such as particular dishes and drinks, place names, and names for ethnic groups. He also notes that these varieties differ in two types of contact features (i.e., initializations and mouthings), both of which reflect the influence of French rather than English. Initialized signs take their handshape from the manual alphabet and use the letter that corresponds to the initial letter of the spoken equivalent of the sign. Thus, in an American ASL sign for "water," the hand takes the W handshape from the manual alphabet. In Malian ASL or LSFA, the hand takes the E handshape, reflecting the initial letter of *eau,* French for "water." Mouthings are partial or full articulations of a spoken word. They may accompany a single sign, be spread over a sequence of signs, or occur without an accompanying sign (Boyes-Braem and Sutton-Spence 2001).

It has been argued that LSFA is the result of a creolization process and as such should be recognized as an indigenous sign language (Kamei 2006). Despite the differences mentioned, signers of North American ASL tend to immediately recognize these varieties as being based on ASL. Interestingly, the ASL/LSFA variety used in Bamako seems to have undergone lexical innovations in semantic domains that are not culture specific and are shared with neither LSM nor other LSAF varieties in other countries. The extent to which the ASL-based varieties have diverged from each other and from ASL varieties in the United States would be an interesting topic for future research.

Sign Language Policies and Facilities in Mali

At present, no qualified interpreters or teachers are available for LSM or the Malian variety of ASL. Despite several incidental attempts to establish them, no regular sign language classes are available for hearing people. The main reason for the discontinuation of these classes was a lack of student interest, mainly parents of deaf children (Dupont 2007). Interpreters and teachers are prerequisites for the participation of deaf people in society. Their marginal availability significantly affects the position of deaf people in Malian society: Because teachers

do not have sufficient signing skills, deaf children do not have access to quality education; in turn, because they cannot freely communicate with decision makers in governmental and nongovernmental bodies, deaf organizations are greatly hampered in their lobby for the human rights of deaf people. In addition, deaf children and adults miss out on vital information about HIV/AIDS and other health campaigns and news bulletins. Projects of governmental and nongovernmental agencies often fail to be realized because, in an earlier or a later stage of the execution of such projects, these agencies realize that having trained interpreters is unquestionably a necessary condition for the success of the campaign. Training interpreters, however, is a long-term effort, one that exceeds the time frame and the budget of the average project. To break through this deadlock, a joint effort of various organizations is required to train qualified sign language interpreters.

The use of two sign languages in Mali poses additional challenges because it is not clear which one should be used for a particular purpose and in a specific context. Educated deaf signers favor the use of ASL, whereas the vast majority of signers have not been formally educated and use LSM.

In various countries, a national association of deaf people lobbies for the linguistic rights of deaf people in the country. In Mali, the oldest and largest such organization is the Association malienne pour les sourds. Originally known as l'Association malienne pour la promotion sociale des sourds et sourds-muets (AMPSOM) in 1989, it received its current name in 1992. In addition, AMASOURD is a member of the Fédération malienne des associations de personnes handicapées (FEMAPH) and of the World Federation of the Deaf. Until 2009 the board of AMASOURD consisted of deaf, hard of hearing, and hearing members. In order to qualify for membership in the World Federation of the Deaf, the board members of AMASOURD are now predominantly deaf persons. The first president of AMASOURD was hearing; later on, hard of hearing and deaf presidents would use speech in official events, including board meetings. In 2009—for the first time—a deaf president was installed who signs at both official and informal events. The lack of qualified interpreters greatly hinders the efficacy of the lobby for deaf rights at the governmental level. Also, the association does not have an official language policy at present.

Malian Sign Language (LSM)

Language Names

Several names are used for the local LSM. To refer to this language, members of the signing community may use one of two signs: MALIAN_SIGN_LANGUAGE-1 (illustrated in figure 2) or MALIAN_SIGN_LANGUAGE-2 (not illustrated). The latter sign is based on SIGNING in ASL. The sign is initialized, and the B handshape refers to Bambara or Bamanan, Mali's spoken lingua franca, which belongs to the Mande language family (Niger-Congo). In speech or writing, the language is sometimes referred to as Langue des signes bambara. Because of the absence of a particular link between the Bambara language and culture, in this article I use the more general term "Malian Sign Language," which is based on the French name, Langue des signes malienne. The term "Bamako Sign Language" refers to the variety of Langue des signes malienne that is used in Bamako.[5] No sign language has been recognized by the Malian constitution so far.

Emergence, Transmission, and Spread

Like other local West African sign languages, such as Hausa Sign Language in Nigeria (Schmaling 2000), LSM has arisen outside a school context. It was developed mostly, if not exclusively, by male signers as a result of gender-based patterns of interaction in Malian society (Pinsonneault 1999). Thus, a typical afternoon pastime in Bamako is a *grin,* where people get together to socialize while preparing and drinking concentrated, black Chinese tea. These are predominantly attended by men (see Gérard 1991). Deaf men are no different in this respect. What is interesting is that their *grins* consist mainly of deaf men. It is not known when deaf people started seeking each other out to form deaf *grins,* but they seem to be crucial locations for the transmission and innovation of LSM (Moustapha Magassouba, pers. comm.). Deaf *grins* are typically held at a popular deaf person's workplace or home. According to deaf signers, communication with hearing people, primarily in and around the house, has also contributed to the formation of the language and continues to do so. In addition, the set of conventional gestures used by hearing Malians seems to be relatively extensive and has been used as a source of lexical items in

Figure 2. malian sign language-i.

LSM. Examples of conventional gestures adopted in LSM are DEAD (figure 3), BEG (figure 4), and REFUSE (figure 5). A number of these conventional gestures and corresponding sign language signs are found in other West African countries as well.[6]

Varieties of LSM are used in Mali's urban centers, including Bamako, Kita, Mahina, Mopti, and Douentza, and are also found in rural communities (e.g., in communities with a relatively high incidence of deafness or in families with several deaf members). The

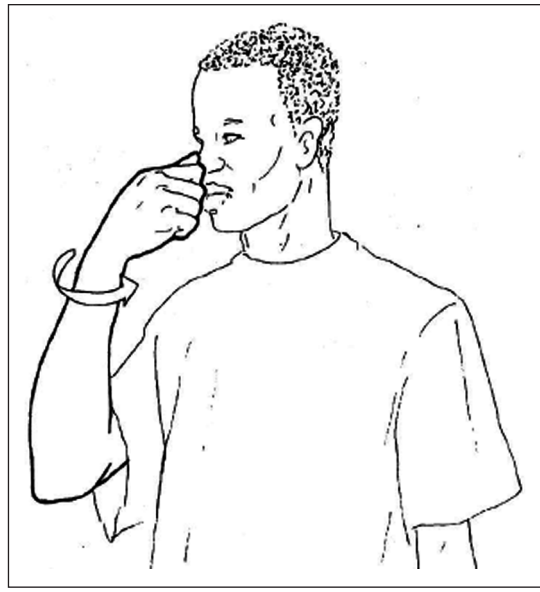

Figure 3. dead.

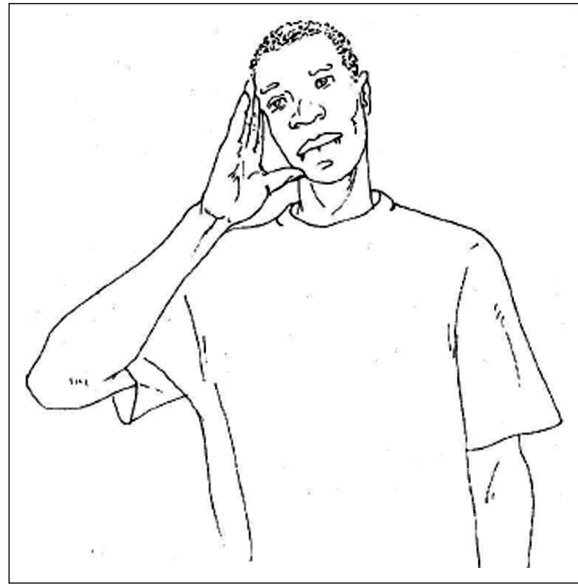

Figure 4. beg-somebody.

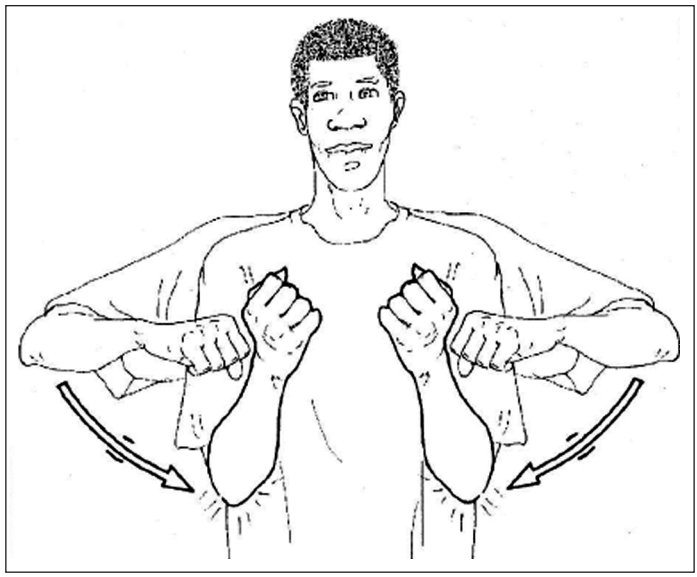

Figure 5. refuse.

variety in Bamako is relatively well documented, as are some of the varieties in the northern part of the Dogon area. The documentation efforts and the relation between the varieties are discussed in the following section.

In Bamako the LSM user community consists mainly of men. This dominance may be reflected in a relatively extensive lexicon for the semantic domain of vehicles and football. Indeed, it was difficult to find women who were good LSM signers for the purpose of the Projet LSM (see the following section). Interestingly, three of the four women we interviewed appeared to have good oral skills and communicated with each other using both speech and signs. Anthropological research is needed to look at this more closely.

Linguistic Research on LSM

Linguistic Research: Lexicography and Documentation

Research on LSM started in the 1990s with the dictionary study of sign linguist Pinsonneault (1999). Compared to many other early dictionaries of African sign languages, Pinsonneault's dictionary is

of high quality, reflecting the linguistic training and intuitions of its makers. This dictionary contains 570 signs as used in Bamako, with their translations in both French and Bambara, as well as occasionally informative comments about their use or origin. Most of the signs are local, although a number of borrowings from other sign languages are also included.

Several signers reported having undertaken an interesting form of informal research. They had traveled to various places outside Bamako and even beyond Mali—to Niger, Nigeria, and Cameroon—to enrich their repertoire of signs.

During my first encounter with the Malian deaf community, I collected name signs with deaf children and adults and made a phonological comparison of them in four sign languages (Nyst and Baker 2003).

In 2007 Projet LSM was launched. Funded by the Endangered Language Documentation Program of the Hans Rausing Endangered Language Project, it was designed to describe and document the LSM variety found in Bamako. The project, based at Leiden University and the Institut des Langues Abdoullaye Barry, in collaboration with AMASOURD, was completed in 2010, resulting in a corpus of more than twenty-seven hours of recorded discourse in LSM and featuring sixty-five signers. Recordings were mainly made in Bamako. Approximately four hours of signing were recorded in Mopti, a town in the center of Mali with a sizeable signing community. The types of discourse include monologues, dialogues, and group discussions. Most of the data consist of personal narratives. A smaller portion consists of semispontaneous data triggered by Zwitserlood's picture sets and mouse and elephant cartoons. Lexical items were collected by discussing particular semantic domains and, in the case of foodstuffs and local medicinal herbs, by talking about items bought at the market. All of the recordings were compressed to mpg1 and mpg2 format and annotated by two teams, each consisting of a deaf and a hearing signer, using the ELAN software developed at the Max Planck Institute for Psycholinguistics in Nijmegen, the Netherlands. All files are annotated either at the gloss level, through a translation at the phrasal level, or through a "resume" annotation. The corpus is available on request by community members and researchers at the Endangered Languages

Archive or the Hans Rausing Endangered Language Program (Nyst, Magassouba, and Sylla 2011). A copy of the corpus has been stored at the National Library in Mali. Articles resulting from this project include Nyst (2008, 2010).

From 2009 to 2012 a survey and documentation project was carried out with the aim of identifying deaf people and documenting their signing in the Dogon area in Mali. The Dogon area is a small, rural, relatively inaccessible region with seventeen different spoken languages (Hantgan 2007). On two visits to the towns of Bandiagara and Douentza and the Dogon villages surrounding Douentza, a deaf-led team encountered a large number of deaf signers. In total, sixty-one signers were filmed while signing. Most of these signers were found in Douentza, where a special unit was set up in a hearing school to accommodate the relatively large number of deaf children there. In addition, several villages were found to have a relatively high incidence of deafness as a consequence of a genetic disposition in two cases and of one or more outbreaks of meningitis in another case. Linguistic analysis of the Dogon signing varieties is yet to be carried out. However, the documentation team noted a good deal of lexical similarity between the Dogon varieties and LSM as used in Bamako. In addition, a number of signs were notably different, even between the signing varieties documented in the Dogon area. All of the data were glossed, provided with metadata, and consequently stored in the online DoBeS (Documentation of Endangered Languages) archive at the Max Planck Institute for Psycholinguistics in Nijmegen (Nyst, Magassouba, and Sylla 2012; see ibid. for a detailed report on deaf people and their signing recorded during this project).

Aspects of the Grammar of LSM

Like all native sign languages of deaf communities, LSM has its own phonology, morphology, syntax, and lexicon. Phonemic parameters first identified for ASL (Stokoe 1960) are found in LSM as well (i.e., hand configuration, location, movement, and optionally a nonmanual component). Evidence of the phonemic status of these parameters is found in (near) minimal pairs that differ mainly or exclusively in one of these parameters, causing a difference in meaning. Thus, the difference in location of EARRING (at the ear) and GHANA (at the

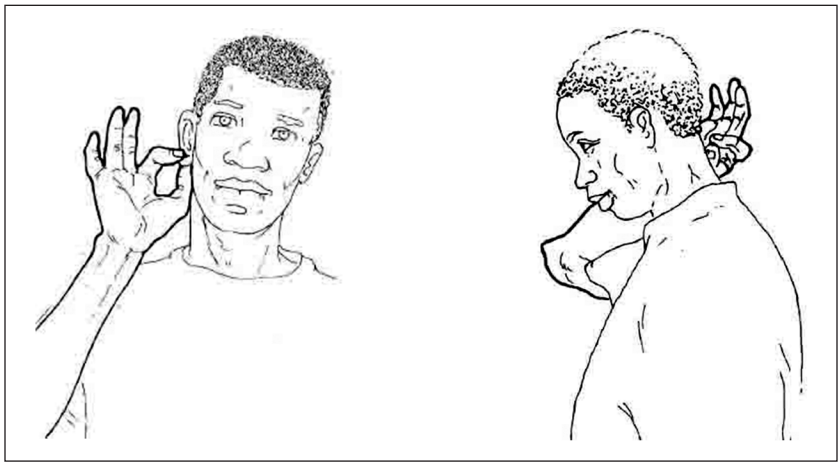

Figure 6. EARRING (left) and GHANA (right): a minimal pair for location.

back of the neck; both illustrated in figure 6) results in a different meaning. Another minimal pair is EVERYTHING and WAIT-FOR-A-LONG-TIME, which differ mainly in their movement (i.e., a sweeping movement as opposed to a repeated downward movement, respectively, as illustrated in figure 7), resulting in distinct meanings. As a final example, the difference in meaning between CÔTE D'IVOIRE and BEE, illustrated in figure 8, arises from the difference in handshape.

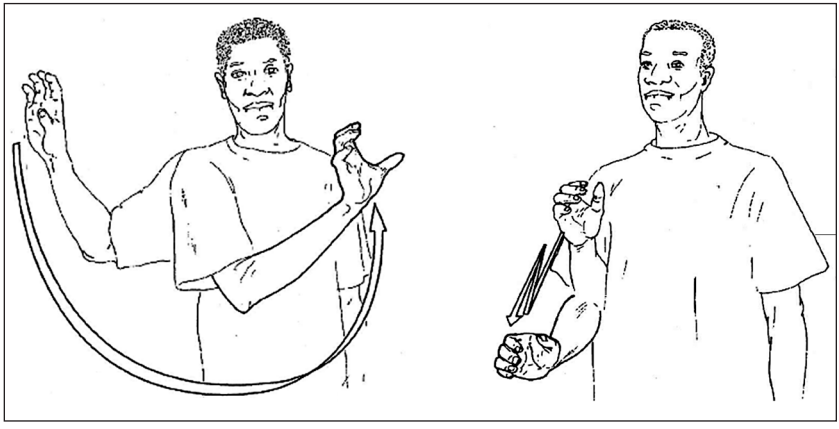

Figure 7. EVERYTHING (left) and WAIT-FOR-A-LONG-TIME (right): a minimal pair for movement.

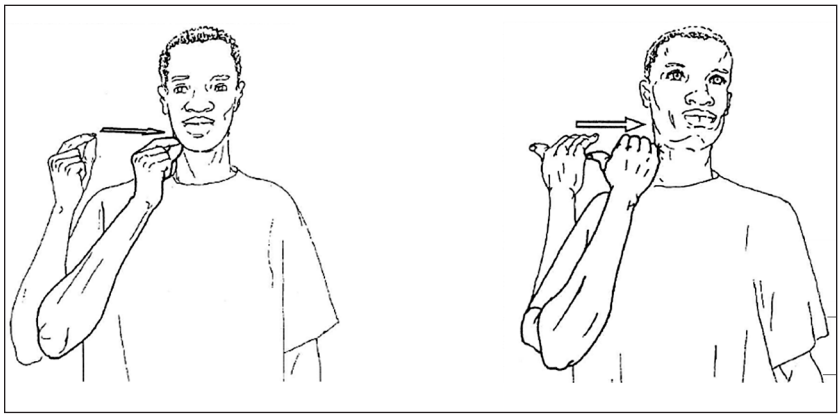

FIGURE 8. BEE (left) and CÔTE-D'IVOIRE (right): a minimal pair for handshape.

Like other well-studied sign languages, LSM makes use of non-manual elements for expressive, adverbial, and grammatical purposes, including the use of role shift to reference animate arguments or the combination of a facial expression with a manual sign for negation and question marking (cf. Zeshan 2004a, 2004b). In addition, LSM has agreement verbs (i.e., verbs that are modified spatially to agree with the arguments of the verb, e.g., GIVE, SAY, ASK-TO-SHARE, VISIT.

Numbers

Malian Sign Language has an extensive number system. The numbers one to five are one-handed; starting with the index finger, an additional finger is extended for each increasing number. For the numbers six to nine the second hand is added, following the same principle except for the fact that SIX is signed by extending the thumb rather than the index finger, thereby presenting a case of spatial rather than anatomical continuity (Bender and Beller 2012). Two signs for "ten" are found, a two-handed sign consisting of two flat hands joined together and a one-handed sign consisting of an index finger extending outward while moving up and down. The same sign with two fingers extended means "twenty"; with three fingers extended, "thirty"; and so on up to "ninety." Different base signs are used for hundreds, thousands, hundreds of thousands, and millions. These can be modified for the number of multiples of the base by extending a corresponding number of fingers, using the same system as described for multiples of

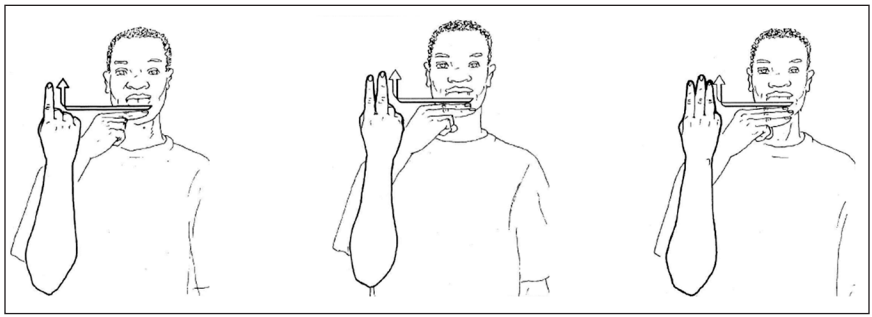

Figure 9. one thousand, two thousand, three thousand (left to right).

ten. Figure 9 illustrates this process for one thousand, two thousand, and three thousand.

Numbers higher than ten seem to be most frequently used to express amounts of money. An interesting feature of LSM's monetary system is that, as in Mali's lingua franca, Bambara, the base unit is the *dɔrɔmɛ,* a coin worth 5 CFA[7] francs (Diallo 2005). The CFA is the current currency of Mali. From 10 *dɔrɔmɛ* (or 50 CFA) on, there is no distinction between general and monetary numbers. Thus, an amount of 500 CFA is expressed by the sign for "100" (coins of 5 CFA each), and an amount of 500,000 CFA by the compound sign for "100,000."

Amounts smaller than 50 CFA are based on a dedicated form expressing single *dɔrɔmɛ* (i.e., a repeated hinging movement of the selected hinged, upright fingers). Thus, the sign illustrated in figure 10 means 1 *dɔrɔmɛ* (i.e., 5 CFA). The number of *dɔrɔmɛ* can be increased up to 9 by adding extended fingers, as illustrated for 2 *dɔrɔmɛ,* or 10 CFA, in figure 11.

This system of handshape modifications to express sums of money clearly resembles the phenomenon of numeral incorporation noted in many other sign languages, where lexical signs for units of time and money (e.g., WEEK, HOUR, YEAR) can be combined with a number handshape to express a particular number of multiples of these units (for ASL, cf. Liddell 1996). However, the signs to express one to nine *dɔrɔmɛ* have no clear lexically independent base sign. Rather, the meaning of *dɔrɔmɛ* is expressed by a combination of movement, location, and orientation features, unspecified for the number of selected fingers.

FIGURE 10. The sign for 1 *dɔrɔmɛ,* or 5 CFA.

FIGURE 11. The sign for 2 *dɔrɔmɛ,* or 10 CFA.

The form of the number signs seems to be prone to regional variation, particularly the higher ones, which are used mainly in a monetary context. Thus, the money signs used in the Dogon area differ from those in Bamako. Moreover, even in Bamako itself, different signs are used according to which side of the river one lives on.[8]

Language Attitudes and the Vitality of LSM

Deaf schools are a crucial factor in the transmission of sign languages and in the determination of their status. Indeed, the policy to use ASL and French in deaf education seems to have greatly affected the use and prestige of LSM. Although LSM has arisen outside of an educational context, present and future deaf children in Bamako will grow up using an ASL-based variety. Adult deaf signers, too, are eager to learn and use ASL and are often bilingual in ASL and LSM. Having virtually no child users and a lower status than ASL, LSM is being replaced by ASL in the deaf community in Bamako and in other places with deaf schools. Moreover, ASL is also spreading to places without deaf schools (e.g., Mopti) as deaf people move between ASL-signing deaf groups and those using a local sign language. An informal network of deaf people is found throughout the country, and deaf travelers often stay at the house of a local deaf leader, who typically also hosts the deaf *grin,* as mentioned earlier. For these reasons, local sign language varieties can be considered endangered. A similar situation exists for Hausa Sign Language, found in northern Nigeria, where ASL is used in education and Hausa Sign Language is used by the adult deaf community (Schmaling 2001). Some ASL signs have been adopted by Hausa Sign Language, including those denoting basic concepts such as HELP, WORK, and HOME. Despite that, Hausa Sign Language is not endangered, as deaf pupils tend to switch to Hausa Sign Language after leaving school (ibid.). To some extent, a similar pattern is evident in Bamako as well. However, the LSM signing of such late learners seems to be significantly more mixed with ASL (both lexically and grammatically) than that of the remaining few monolingual LSM signers in Bamako.

Despite parallels in the distribution of ASL and the local sign language in Mali and northern Nigeria, some crucial differences have been noted, mainly in terms of exposure to ASL and language attitude.

The oldest and largest school for deaf children, the EDA, is located in a central area of Bamako, where many tourists visit and expats reside. As a result, this school receives many American and Canadian visitors (typically hearing but occasionally deaf), some of whom support the school by contributing ASL materials and volunteering at the school, sometimes even as ASL teachers. Thus, exposure to ASL may be greater than in the case of Hausa (Schmaling 2001). Also, the attitudes toward ASL and the local sign language seem to differ in Bamako, Kano, and the surrounding areas. Prominent persons in the deaf community, the association of deaf people, and the schools for deaf children, some of whom were trained by the Reverend Andrew Foster in Nigeria, have favored the use of ASL in educational and other contexts. There seems to be social pressure to adopt initialized, ASL-style name signs: Those who retain their old name sign are ridiculed for being backward or because their name sign is homophonous with an ASL sign. Although Schmaling (ibid.) does not discuss attitudes toward ASL and Hausa Sign Language or their relative prestige, it seems that the two languages have equal status. In view of a possibly greater exposure to ASL and its apparent superior status in Mali (as compared to northern Nigeria) and the observed tendency for adult signers to adopt ASL, it is likely that LSM will disappear or show rapid and significant contact-induced change over the coming generations of deaf signers if the prestige balance of both languages does not change.

The position of ASL at Malian schools for deaf children is enforced by U.S. initiatives supporting the schools, such as the introduction of ASL books with technical jargon and Peace Corps volunteers coming in to teach ASL.

During a deaf empowerment training in January 2008, organized as part of Projet LSM (discussed earlier), in which around fifty deaf people, mostly from Bamako, were involved, two motivations for using ASL in education were mentioned. First, it was claimed that "one needs ASL to be able to attend international conferences." Second, it was said that "it is better to use ASL in education because LSM has no structure." Other participants, however, argued in favor of maintaining LSM, the primary language of a segment of the Malian deaf community: "We don't dislike LSM. We want to keep it because we use it when we go to meet our [hearing] family members in the village."

This is an interesting claim, as the gestural communication used in the infrequent encounters with hearing family members differs significantly from LSM in structure, extent of the lexicon, prosody, and functionality. Nonetheless, this claim suggests that these signers equate LSM with the gestural communication they use with their hearing family members on their occasional visits. In view of the complexity of the LSM grammar and lexicon (as observed in Bamako), it is unlikely that occasional communication with hearing family members has the same complexity. However, it is possible that a continuum exists between the two forms.

Another empowerment training program was held by the World Federation of the Deaf in 2009 and 2010 as part of its deaf human rights and capacity-building project in western and central Africa. During this program, board members were encouraged to recognize the value of LSM. The impact of these sessions on the sign language situation in Mali remains to be seen.

In an online interview,[9] the director of one the schools for deaf children in Bamako states that LSM was discarded as the language of instruction because "it does not contain all the signs, and there has been no research done on it" (my translation). Instead, the director favors the use of ASL because "all of the countries in the subregion [West Africa] use American Sign Language." Other arguments given for utilizing ASL are the availability of documentation and the fact that the language is "well structured." The latter two arguments no longer hold sway because, in addition to the excellent LSM dictionary (Pinsonneault 1999) mentioned earlier, there are now two large, annotated video corpora of LSM (discussed earlier) as used in various parts of the country. From a linguistic standpoint, it is highly unlikely that LSM is less structured than ASL.

Conclusion

Mali is a country with a relatively high incidence of deafness and vibrant signing communities. In comparison to neighboring countries, deaf education was established there relatively late. In neighboring countries, Andrew Foster and his organization, the Christian Mission of the Deaf (CMD), often played a pioneering role, introducing deaf education together with a form of ASL (based on English or French

word order). However, the CMD did not set up a school for deaf children in Mali, which delayed the introduction of ASL there. As a result, the local sign language of Mali was not pushed completely out of sight, as seems to have happened in surrounding countries, such as Ghana and the Ivory Coast. Various individual, communal, national, regional, and international factors currently influence the status and use of LSM. It is an open question as to how the sign language situation in Mali will develop.

What is evident, however, is that this situation is a vibrant one. Despite the lack of resources (including signing skills in some hearing teachers), deaf education in Mali has always been supportive of sign language use. The tight-knit deaf community of Bamako, with the EDA as its home base, provides a rich signing environment for deaf children and adults. Outside of deaf education, smaller signing communities such as those near Douentza have evolved spontaneously. Although research is needed to establish the level of lexical similarity between Mali's sign language varieties, it is clear that they share a significant vocabulary, including an extensive repertoire of the conventional gestures of hearing Malians. Both the Malian variety of ASL and the many varieties of LSM provide ample opportunities for further research.

A final important point is that the participation of deaf citizens in industrialized (urban) areas in Mali is hampered by the lack of basic sign language facilities, such as interpreters and sign language teachers. The establishment of facilities for sign language instruction and for qualified sign language interpretation is urgently needed.

Notes

1. I thank Annelies Kusters, Mariska van Zanten, the editor, and an anonymous reviewer for comments on earlier versions of this article. As usual, any mistakes are mine.

2. Https://www.cia.gov/library/publications/the-world-factbook/, accessed on September 29, 2013.

3. Ibid.

4. For a review of African sign language dictionaries see Schmaling (2012).

5. www.ethnologue.org, accessed on 11/5/2010. The ISO code given by Ethnologue for this variety is [bog].

6. These conventional gestures were collected and stored in the Gesture Research in Africa database that I developed at Leiden University in an ongoing effort to document emblems or quotable gestures in Africa.

7. CFA stands for Communauté Financière d'Afrique (Financial Community of Africa).

8. The examples are from Pinsonneault (1999) and are reprinted here with the permission of the author and the publisher. They illustrate the variety on the western side of Bamako.

9. Http://www.yanous.com/tribus/sourds/sourds090605.html, accessed on April 25, 2013.

Acknowledgment

I thank Moustapha Magassouba for being the model for figure 2, MALIAN SIGN LANGUAGE-1.

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